# Facts for Consumers



HOME
WATER
TREATMENT
UNITS



Bureau of Consumer Protection
Office of Consumer & Business Education
202-FTC-HELP www.ftc.gov

August 1993

Produced in cooperation with the Environmental Protection Agency

### TIPS-ON-TAP

- Before buying a water treatment unit, get water-quality information from your local public water or health departments.
- If you suspect a problem, you may want to hire a competent water-quality contractor or have your water analyzed by a state-approved testing laboratory.
- If you need a water treatment unit, investigate the various ones available. Select one specifically suited for your water problem.
- Avoid fraudulent sellers. Watch out for the sales pitches and false claims described on pages 7-9.

henever you turn on the tap at home, you may wonder if chemicals or particles are affecting the taste or appearance of your drinking water. You may even worry about harmful organisms, like bacteria, or chemical pollutants, like pesticides or industrial solvents.

If you suspect a problem with your drinking water, you may have thought about buying a home water treatment unit. This brochure discusses what to consider before buying a water treatment unit and the various types available. It also warns against high-pressure salespersons who use scare tactics or make false claims to sell you a unit — whether or not you need one.

**Note:** If you use public drinking water that meets national/state standards, home treatment seldom is needed for health reasons.

# HOW DO I KNOW IF I NEED A UNIT?

Consumers get their drinking water primarily from two sources: public water supplies and private wells.

Under the Safe Drinking Water Act, all public water supplies must meet the drinking water standards set by the Environmental Protection Agency (EPA). Some states have even more stringent standards. For information about the quality of your public drinking water, contact your local water utility office.

In contrast, private well owners are subject only to state and local laws, and they are responsible for the quality of water from their wells. Most well water is safe; however, some may need treatment. For help with possible drinking water problems in a private well, contact your local health department.

If you want to have your water analyzed, use a state-approved testing laboratory. To find out where you can get a list of state-certified labs, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791. If you discover a problem with your drinking water, you may want to hire a competent water-quality contractor to help you select the appropriate water treatment unit.

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# WHAT KIND OF UNITS ARE AVAILABLE?

If you discover a problem with your water, select a unit specifically designed to treat it. *No single unit will solve all water problems*. This section describes some common types of water treatment units and explains how they work.

### PHYSICAL FILTERS

These simple units are designed to remove particles from the water, such as grit, sediment, dirt, and rust. They often are made of fabric, fiber, ceramic, or other screening material.

Some filters can remove even small organisms like cysts and bacteria and small particles like asbestos fibers. The filters are inadequate for microbiologically unsafe water because they cannot remove all disease-causing organisms.

### **ACTIVATED CARBON FILTERS**

These filters may improve the smell, taste and appearance of your drinking water by removing some organic chemical contaminants. They cannot remove most inorganic chemicals — like salts or metals — but may reduce some, like chlorine. Do not use these filters exclusively on water that contains harmful organisms.

To remove lead from your drinking water, get a specially-prepared activated carbon filter. Ask the salesperson for a *written* assurance of its effectiveness against lead.

Carbon filters may become saturated with the chemical impurities they remove. This is especially true with activated carbon filters. Also, municipal drinking water usually carries harmless levels of bacteria even though it has been disinfected. These bacteria can collect and multiply on an activated carbon filter. Therefore, you should change the filter cartridge according to the manufacturer's instructions.

Before purchasing an activated carbon filter, ask whether the filter can be replaced. If so, find out how often it should be replaced; how to tell when it needs to be replaced; where you can buy replacement filters and how much they cost. Activated carbon filters are available in several forms: granular; powdered; powdered coated paper; and pressed carbon block.

Carbon filters, registered as bacteriostatic by the EPA, have the pesticide silver in the filter. Under the Federal Insecticide, Fungicide and Rodenticide Act, these filters must be registered with the EPA. This does not mean that the EPA recommends, approves, or endorses the product.

Studies on the effectiveness of bacteriostatic filters have shown unpromising results as to their ability to control bacterial growth. Further, a bacteriostatic carbon filter is not adequate to treat water that is microbiologically unsafe, such as fecally-contaminated water.

### REVERSE OSMOSIS (RO) UNITS

With these units, water passes through a membrane and is collected in a storage tank. RO units remove substantial amounts of most inorganic chemicals, such as salts, metals (including lead), asbestos, minerals, nitrates, and some organic chemicals. RO units alone are not recommended for use on microbiologically unsafe water.

RO units have several disadvantages. They typically waste about 75 percent of the tap water put into them. For one gallon of RO filtered water, it may take four gallons or more of tap water. Also, the tap on the storage tank flows more slowly than the tap on your regular faucet.

The membranes on RO units are subject to decay and failure and must be replaced periodically. Follow the manufacturer's recommendations about proper maintenance and use.

### DISTILLATION UNITS

These units, which are available in many different shapes and sizes, vaporize water and then condense it. This process removes most dissolved solids, such as salts, metals, minerals, asbestos fibers, particles, and some organic chemicals. Distillation units, however, may not remove all chemical pollutants, and some bacteria may pass through in some instances. Although distillation may be an effective water treatment, the water heating will add to your energy use.

### ULTRAVIOLET (UV) DISINFECTION

These units may destroy bacteria and inactivate viruses, without leaving a taste or odor in the water. UV units cannot remove most chemical pollutants. The EPA questions whether UV is effective against spores and cysts.

As with all water treatment units, UV disinfection units must be properly maintained. Dissolved and suspended solids from the water may build up on the unit, blocking the ultraviolet light from reaching the running water. To ensure that the water is adequately exposed to the light, UV units must be cleaned periodically.

# WHAT ELSE SHOULD I CONSIDER?

Once you determine which type of unit you need, comparison shop for costs, cancellation and refund policies, installation methods, maintenance requirements, and warranties.

**Installation.** Ask how the unit must be installed and who is responsible for doing it. If it must be done by a professional, ask whether the unit's purchase price includes installation.

Some units are installed under the kitchen sink and treat all cold water going into the tap. Other ones only treat water diverted from the cold water line and deliver it to a separate faucet. Some units are mounted on the faucet, while others rest on the counter top.

**Maintenance.** To be effective, water treatment units must be maintained properly. Some units require more maintenance than others.

Before you buy, ask about the unit's maintenance requirements and, if possible, review the owner's manual or manufacturer's recommendations. You might find out how often unit parts must be replaced, the cost of replacement parts, and where they can be bought — whether from local stores or only from the manufacturer. After using a water treatment unit for a time, be aware of changes in sediment, water pressure, and taste in your water. Such changes may indicate that the filter should be replaced.

Warranties. If a filter comes with a written warranty, take the time to read what parts and costs are covered under the warranty, and, if you have problems with the unit, whether you can get a replacement or a refund. Ask where repairs would be done. If the unit needs to be repaired by the manufacturer, ask how long the repair usually takes and who pays shipping charges.

# HOW CAN I PROTECT MYSELF FROM DECEPTIVE SALES PRACTICES?

While many sellers of water treatment units are legitimate, some are not. Be wary if you're told:

"The water in your area is contaminated." As part of their sales pitches, some dealers may falsely claim that the drinking water in

your area contains a harmful level of chemical contaminants, such as chlorine or lead. Verify the dealer's claims about your drinking water with your local or state department of health.

# "Our product is approved by the government."

Some sellers claim that certain government agencies require or recommend widespread use of water filters in homes or restaurants. They even may claim that the government has approved a particular unit. Both claims are false.

If you see an EPA registration number on a product label, it merely means that the manufacturer has registered its product with the EPA. It does not indicate that the EPA has tested or approved the product or substantiated the manufacturer's claims.

# "Our in-home test shows your water is unsafe."

To get a foot in the door, some sellers advertise free in-home test of your drinking water. While in-home testing may be a legitimate sales tool, some promoters use unsophisticated tests to convince you that you need to buy their product.

For example, a salesperson may test only for acidity/alkalinity, water hardness, iron, manganese, and color. None of these indicate the presence of harmful contaminants. Others may test only for chlorine, which may be present in your drinking water but not at harmful levels.

# "You have won a prize!"

Some companies send out postcards saying that you have been selected to receive a prize. You must dial a phone number, usually toll-free, to get more details. If you call, you may discover that you must buy a water treatment unit to be eligible for a prize. The unit may cost hundreds of dollars, but the prize may be of little or no value.

# "Now, we just need your credit card number..."

Sometimes telemarketers request your credit card number, saying they need to verify your eligibility for a prize or to bill your account. Be cautious about giving your credit card number over the phone to someone you do not know.

Many consumers who have purchased water treatment units from telephone salespersons have found later that the units do not remove contaminants from the water. In addition, they found it difficult — or impossible — to cancel an order or return the product for a refund.

# WHERE CAN I GET MORE INFORMATION?

Before you buy a water treatment device from a manufacturer unfamiliar to you, contact your state consumer affairs office or your local Better Business Bureau. Find out if they have received any complaints against the company. Other resources are listed below.

# For background on federal regulation of drinking water, contact:

U.S. Environmental Protection Agency Office of Drinking Water Washington, DC 20460 Safe Drinking Water Hotline 1-800-426-4791 (National Toll Free)

# For more information on specific water treatment devices, write or call: NSF International

789 Dixboro Road Ann Arbor, MI 48105 734-769-8010

www.nsf.org

NSF operates a voluntary certification program for water treatment products. Although NSF cannot rate or recommend a particular brand, it may be able to provide useful information about various devices and technologies.

# The Water Quality Association

4151 Naperville Road Lisle, IL 60532-1088 630-505-0160 www.wqa.org

# For information about bottled water, contact:

# **Food and Drug Administration**

US Department of Health and Human Services 5600 Fishers Lane Rockville, MD 20857 301-827-4420

### **International Bottled Water Association**

1700 Diagonal Road, Suite 650 Alexandria, VA 22314 703-683-5213

## WHAT IF I HAVE A COMPLAINT?

To resolve problems concerning a water treatment unit, first try settling your dispute with the company that sold you the product. If you are not satisfied, contact your local consumer protection agency or state Attorney General. You also can contact your local Better Business Bureau (BBB). To find the BBB office nearest you, check your telephone directory, or write:

Council of Better Business Bureaus
4200 Wilson Boulevard
Arlington, VA 22203

You also can file a complaint with the FTC. Contact the Consumer Response Center by phone: 202-FTC-HELP (382-4357); TDD: 202-326-2502; by mail: Consumer Response Center, Federal Trade Commission, Washington, DC 20580; or by e-mail: use the complaint form at www.ftc.gov.

Although the FTC cannot intervene in individual disputes, for enforcement purposes, it is interested in learning about home water treatment sales practices you believe to be deceptive.